

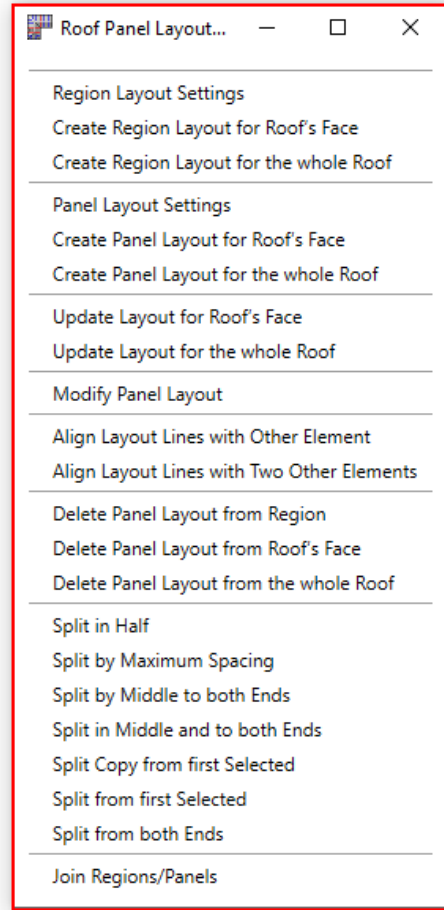
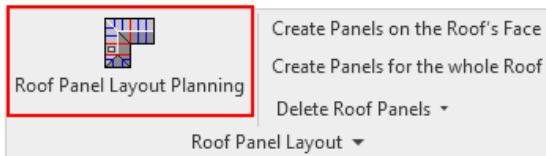
# Roof Panel Layout

Modified on: Wed, 3 Mar, 2021 at 1:16 PM

**Roof Panel Layout** is the ultimate prefabricated roof paneling software for Autodesk Revit. A powerful product for planning roof panels and splitting them into individual segments or continuous timber/metal framed roofs.

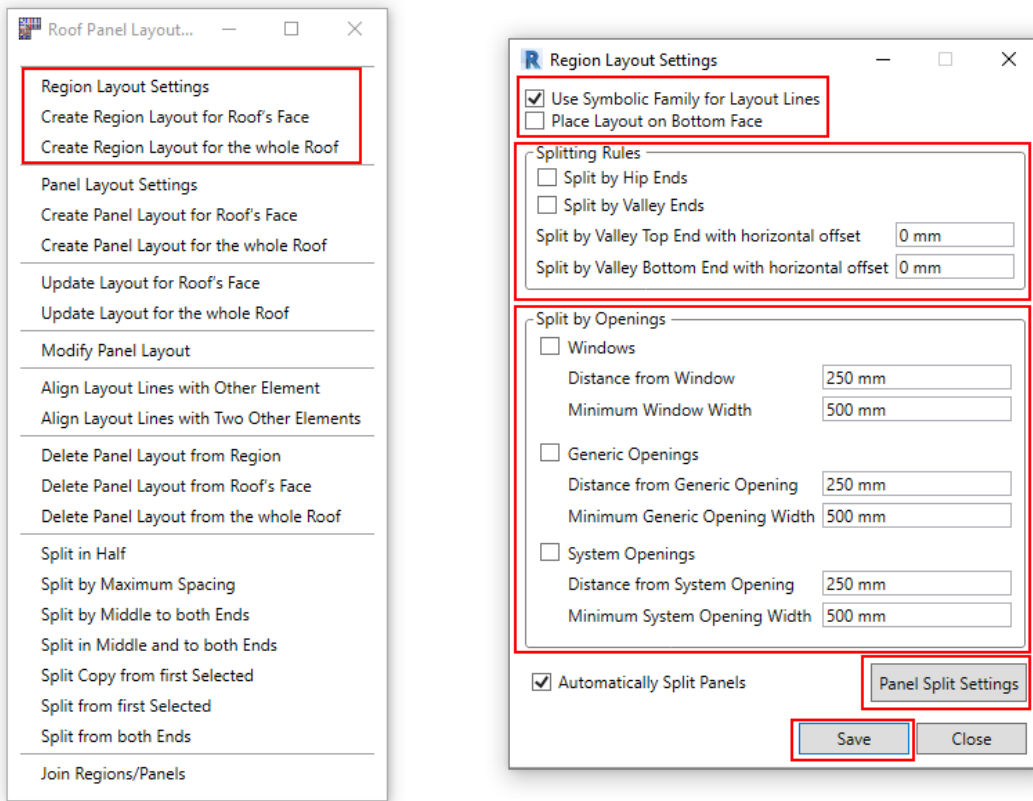
- Select **Roof Panel Layout Planning** from **Roof Panel Layout** menu

Note: users can control every division line and automate the division process by modifying rules.



- Select **Region Layout Settings** from **Roof Panel Layout Planning** menu

Note: Region layout is used for a coarse roof partitioning. Later regions can be divided into prefabrication panels.



From the beginning, the architect's designed roof can be divided into coarse partitions, or regions. Regions can be created automatically by using **Windows**, **Generic** or **System Openings** with predefined distances.

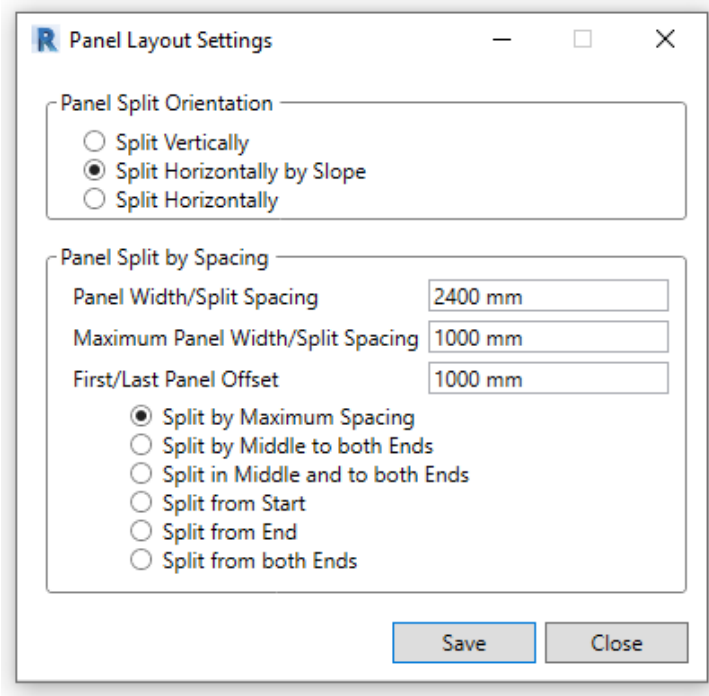
- **Use Symbolic Family for Layout Lines** – if ticked, adds Symbolic Family to represent layout arrangement and direction
- **Place Layout on Bottom Face** – if ticked, creates Roof Panel Layout on bottom roof's face. If not ticked, creates the layout on upper roof's face
- **Automatically Split Panels** – if ticked, panels will be created automatically along with regions, when using functions "Create Region Layout for Roof's Face" and "Create Region Layout for the whole Roof"

### Split by Openings

- **Windows** - if ticked, offset splits to both sides by predefined Distance from Window from that exceed predefined Minimum Window Width
- **Generic Openings** – if ticked, offset splits to both sides by predefined Distance from Generic Opening that exceed predefined Minimum Generic Opening Width
- **System Openings** – if ticked, offset splits to both sides by predefined Distance from System Opening that exceed predefined Minimum System Opening Width

- **Panel Split Settings / Panel Layout Settings** - opens a dialog where settings for panel layout planning can be predefined

Note: panel Split Settings can automatically split roof panels determined by sizes, spacing, orientation and offset.



- **Panel Split Orientation** - allows to orient panel vertically, horizontally or by slope
- **Panel Width/Split Spacing** – predefined spacing for panel splitting
- **Maximum Panel Width/Split Spacing** – predefined maximum spacing for panel splitting
- **First/Last Panel Offset** – predefined first/last spacing for panel splitting.

**Split by Maximum Spacing Splits** - selected region by maximum spacing predefined in configuration. Maximum spacing is configured in Panel Layout Settings

**Split by Middle to Both Ends Splits** - selected region from the middle to both ends by spacing predefined in configuration. Split spacing is configured in Panel Layout Settings

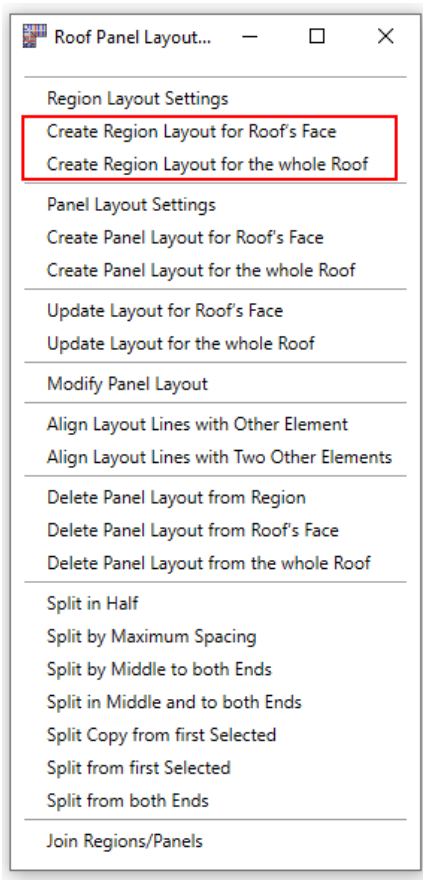
**Split in Middle and to Both Ends Splits** - selected region in its middle and arrays splits to both ends by spacing predefined in configuration. Split spacing is configured in Panel Layout Settings

**Split from Start/End Splits** - selected Region from Start/End by spacing predefined in configuration. Split spacing is configured in Panel Layout Settings

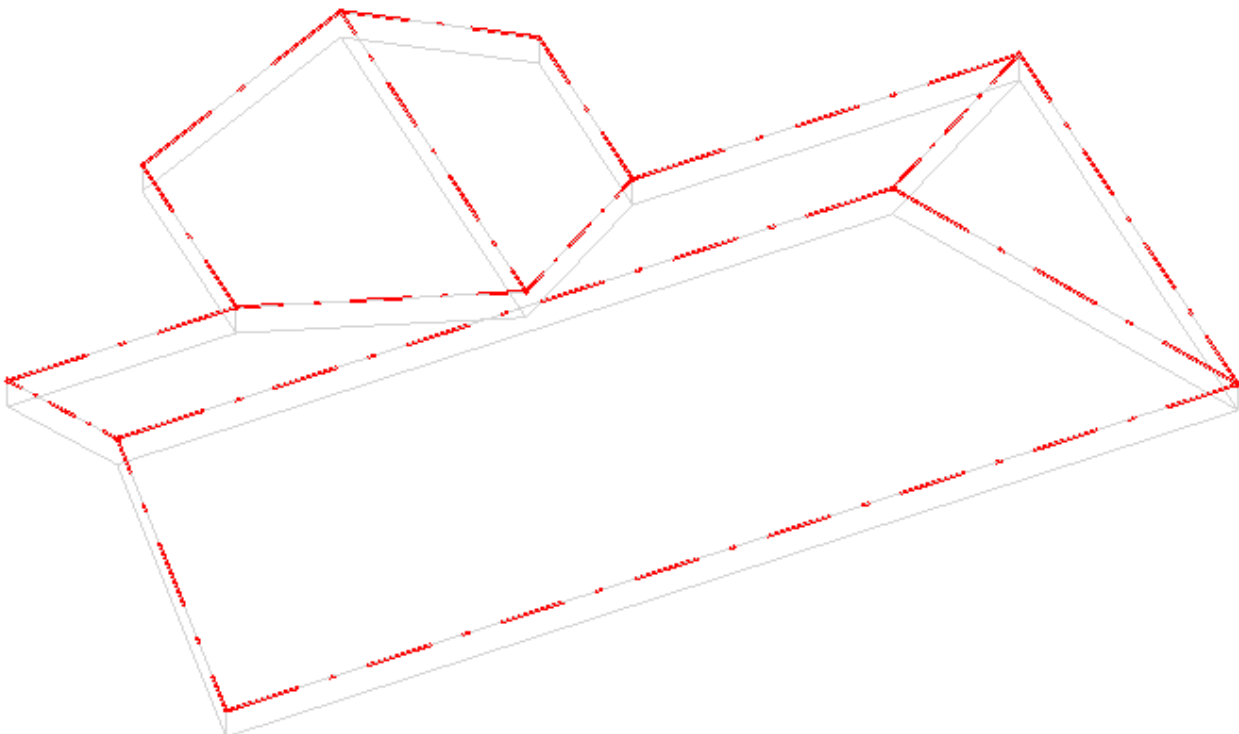
**Split from Both Ends Splits** - selected Region from both ends by spacing predefined in configuration. Split spacing is configured in Panel Layout Settings.

## Create Region Layout for Floor's Face/whole Roof

- Select Revit roof
- Select **Create Region Layout for Roof's Face/whole Roof** from **Roof Panel Layout Planning** menu



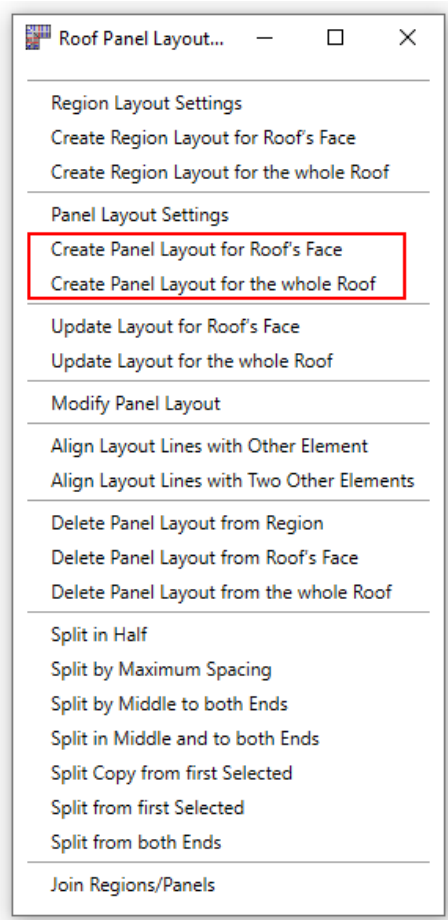
- **Create Region Layout for Floor's Face/whole Floor** - creates region layout by predefined rules for the selected face of a roof or the whole roof



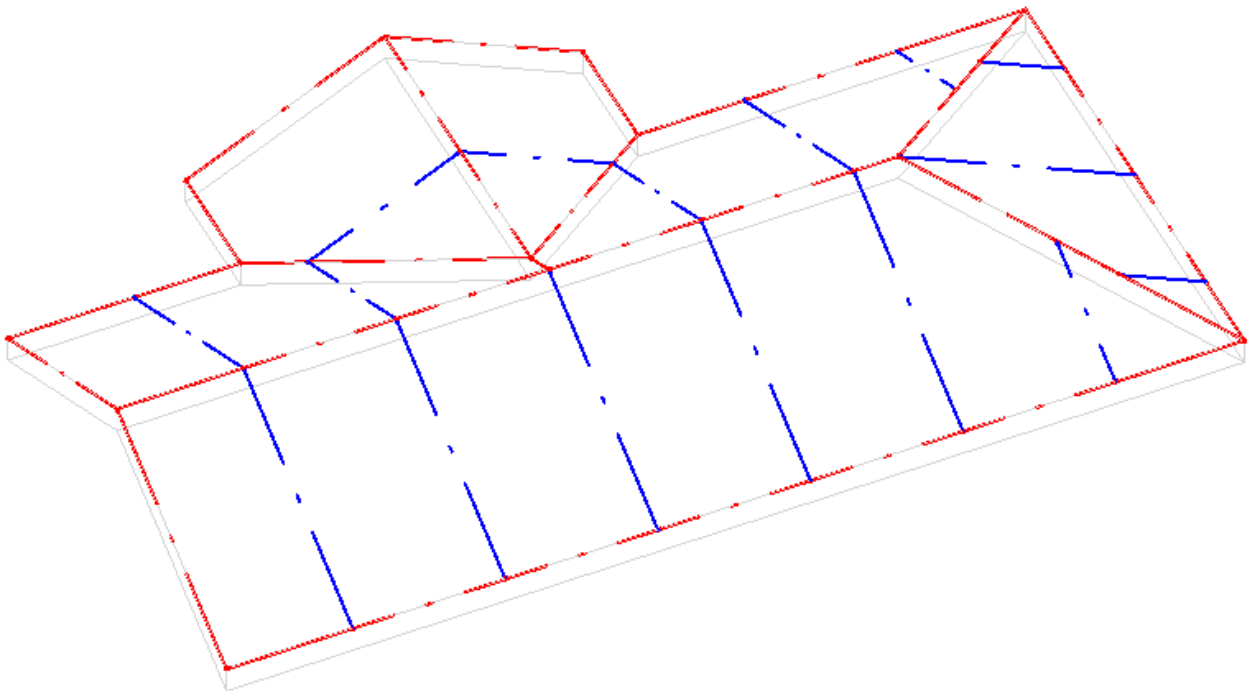
Note: regions are displayed with red dotted lines



- Select Revit roof
- Select **Create Panel Layout for Roof's Face/whole Roof** from **Roof Panel Layout Planning** menu



- **Create Panel Layout for Roof's Face/whole Roof** - creates panel layout by predefined rules for the selected face of a roof or the whole roof

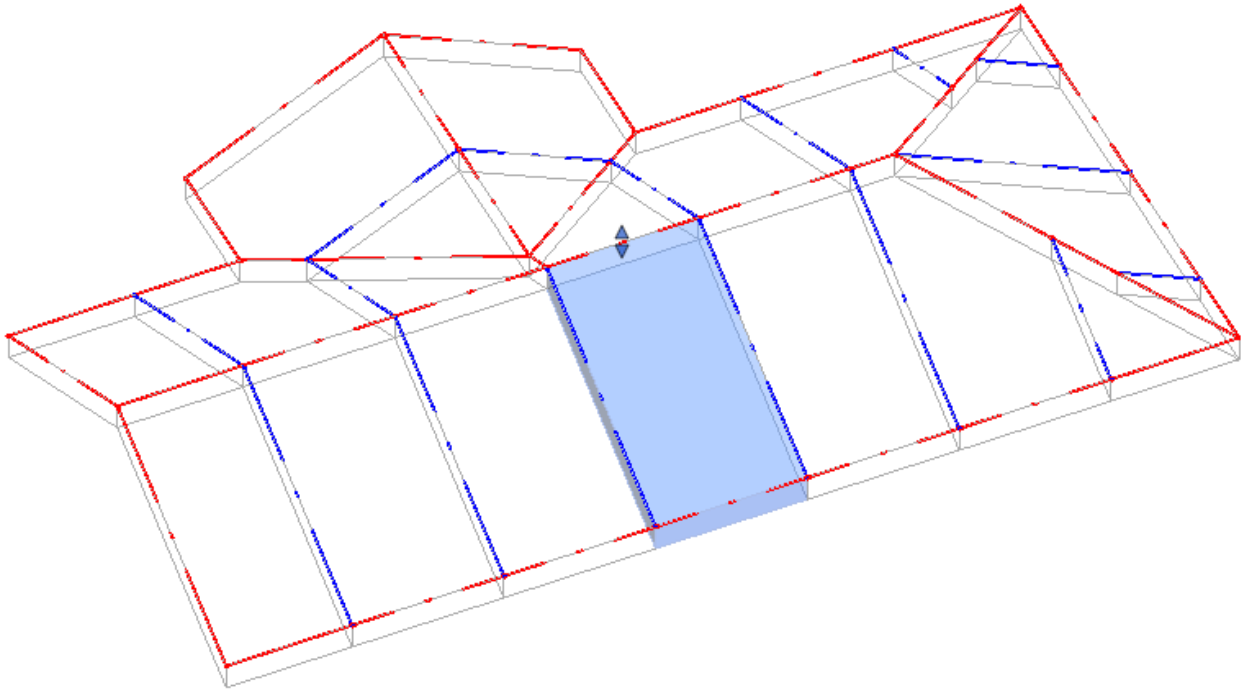
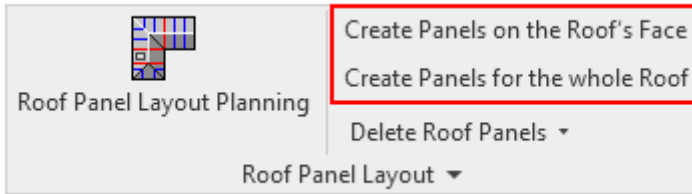


Note: panels are displayed with blue dotted lines

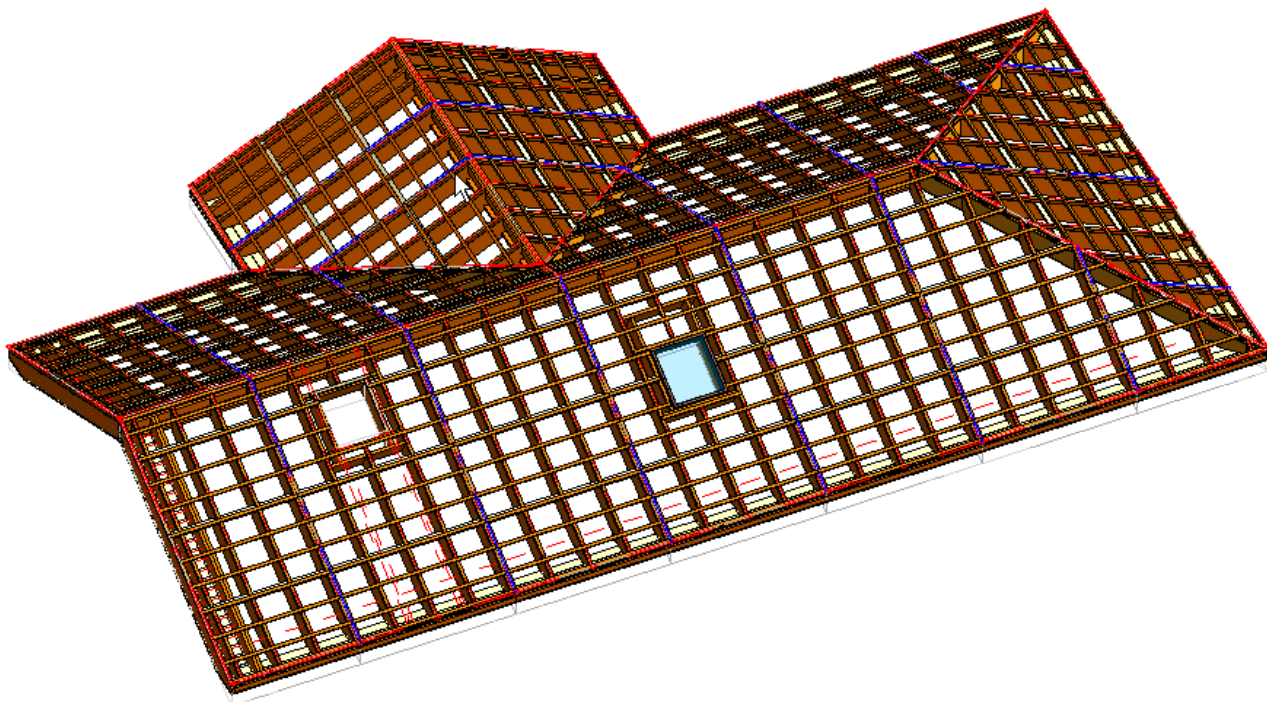
- Regions can be divided into panels by predefined spacing as shown before
- Panel layout is used to split floor into prefabricated segments

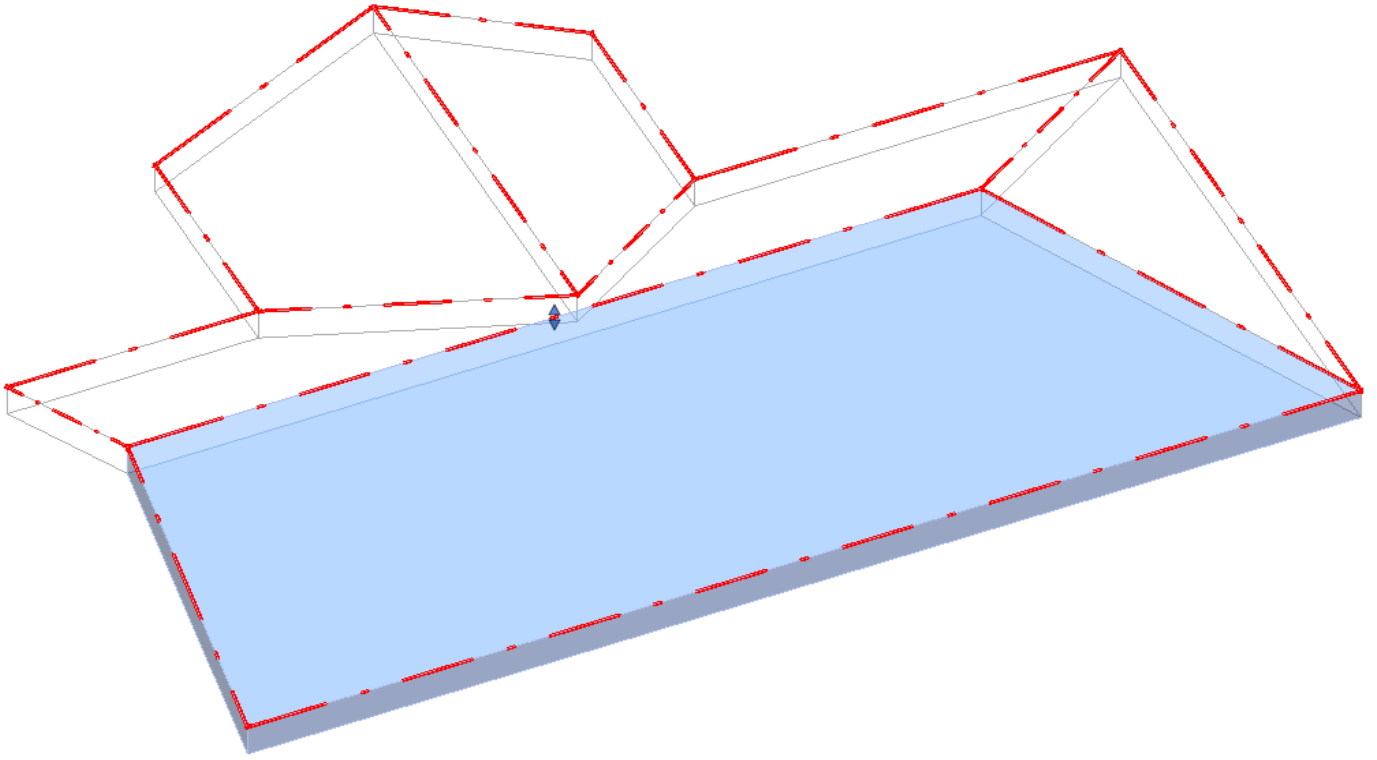
- Panel layout later will be converted into actual roof panels

- Once **Region Layout** and **Panel Layout** are set - select **Create Panels on the Roof's Face/whole Roof**

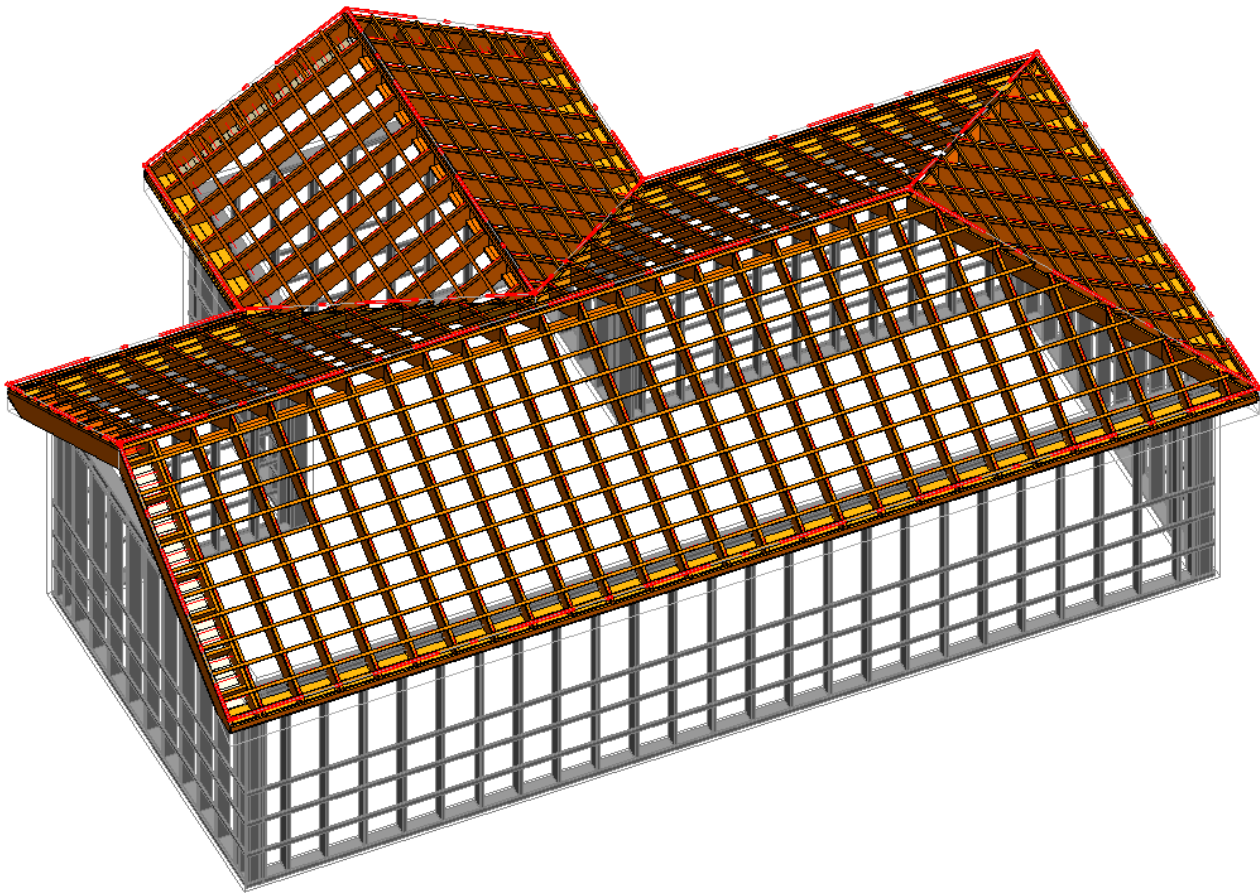


- Generated roof panels will be used with **Roof+** for framing

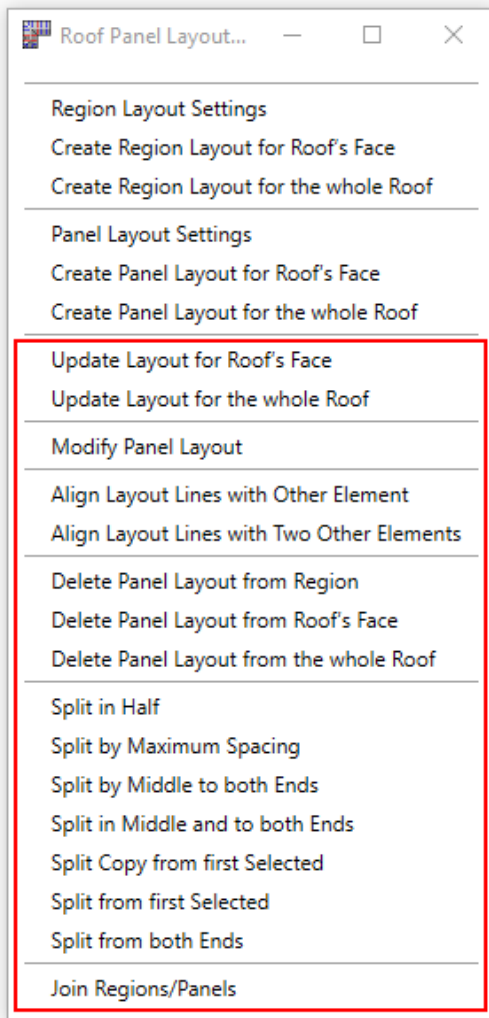




- Generated roof panels will be used with **Roof+** for framing







**Update Panel Layout for Roof's Face** - updates region and panel layouts according to roof geometry changes for the selected face of a roof. Region and panel layouts will be re-created by the default region and panel layout settings.

**Update Panel Layout for the whole Roof** - updates region and panel layouts according to roof geometry changes for the whole selected roof. Region and panel layouts will be re-created by the default region and panel layout settings.

**Modify Panel Layout** - modifies selected panel layout. You can define layout rules and spacing.

**Update Panel Layout** - updates panel layout according to **Modify Panel Layout** settings.

**Align Layout Lines with Other Element** - aligns all layout lines in one region with one selected line from another region.

**Align Layout Lines with Two Other Elements** - aligns all layout lines in one region with two selected lines from another region.

**Delete Panel Layout from Region** - deletes panel layout from the selected region.

**Delete Panel Layout from Roof's Face** - deletes region and panel layouts from the selected face of a roof.

**Delete Panel Layout from the whole Roof** - deletes region panel layouts from the whole selected roof.

**Split in Half** - splits selected region or panel in half.

**Split by Maximum Spacing** - splits selected region or panel by maximum spacing predefined in configuration. Maximum spacing is configured in panel layout settings.

**Split by Middle to Both Ends** - splits selected region or panel from the middle to both ends by spacing predefined in configuration. Split spacing is configured in panel layout settings.

**Split in Middle and to Both Ends** - splits selected region or panel in its middle and arrays splits to both ends by spacing predefined in configuration. Split spacing is configured in panel layout settings.

**Split Copy from first Selected** - creates a copy and splits selected region or panel from the first selected line by spacing predefined in configuration. Split spacing is configured in Panel Layout Settings.

**Split from First Selected** - splits selected region or panel from the first selected line by spacing predefined in configuration. Split spacing is configured in panel layout settings.

**Split from Both Ends** - splits selected region or panel from both ends by spacing predefined in configuration. Split spacing is configured in panel layout settings.

**Join Regions/Panels** - joins two regions or panels into one by deleting the selected line.